



## ANALYTICAL REPORT

Lab Number:	L1307153
Client:	Environmental Health & Engineering Inc. 117 Fourth Ave Needham, MA 02494
ATTN:	Tuan Truong
Phone:	(781) 247-4300
Project Name:	Not Specified
Project Number:	18536
Report Date:	05/07/13

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**Project Name:** Not Specified  
**Project Number:** 18536

**Lab Number:** L1307153  
**Report Date:** 05/07/13

<b>Alpha Sample ID</b>	<b>Client ID</b>	<b>Sample Location</b>	<b>Collection Date/Time</b>
L1307153-01	136849	Not Specified	04/19/13 00:00
L1307153-02	136850	Not Specified	04/19/13 00:00
L1307153-03	136851	Not Specified	04/19/13 00:00
L1307153-04	136852	Not Specified	04/19/13 00:00
L1307153-05	136853	Not Specified	04/19/13 00:00
L1307153-06	136854	Not Specified	04/19/13 00:00
L1307153-07	136855	Not Specified	04/19/13 00:00
L1307153-08	136856	Not Specified	04/19/13 00:00
L1307153-09	136857	Not Specified	04/19/13 00:00
L1307153-10	136858	Not Specified	04/19/13 00:00
L1307153-11	136859	Not Specified	04/19/13 00:00
L1307153-12	136860	Not Specified	04/19/13 00:00
L1307153-13	136861	Not Specified	04/19/13 00:00
L1307153-14	136862	Not Specified	04/19/13 00:00
L1307153-15	136863	Not Specified	04/19/13 00:00

**Project Name:** Not Specified  
**Project Number:** 18536

**Lab Number:** L1307153  
**Report Date:** 05/07/13

### Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet all of the requirements of NELAC, for all NELAC accredited parameters. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. Performance criteria for CAM and RCP methods allow for some LCS compound failures to occur and still be within method compliance. In these instances, the specific failures are not narrated but are noted in the associated QC table. This information is also incorporated in the Data Usability format for our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

#### HOLD POLICY

For samples submitted on hold, Alpha's policy is to hold samples free of charge for 30 days from the date the project is completed. After 30 days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples.

Please contact Client Services at 800-624-9220 with any questions.

**Project Name:** Not Specified  
**Project Number:** 18536

**Lab Number:** L1307153  
**Report Date:** 05/07/13

### Case Narrative (continued)

PCB Homologues in Air

Samples L1307153 - 01, -02, -03, -04, -06, -07, -08, -09, -10, and -11: Concentrations for compounds flagged with G qualifiers may be biased high due to matrix interference included in the quantitation.

The surrogate recoveries for samples L1307153-01, through -12, -14 and -15 were above the acceptance criteria for Cl3-BZ#19-C13. A re-extraction of the sample could not be performed due to the sample matrix. The original sample extract was re-analyzed for confirmation. The results of the original analysis are reported.

The surrogate recovery for the Laboratory Control Spike, WG604257-2, is outside the acceptance criteria for Cl3-BZ#19-C13 (138%); however, re-extraction could not be performed due to sample matrix. The original sample extract was re-analyzed confirming the elevated recovery. All laboratory control spiked compounds met acceptance criteria. The results of the original analysis are reported.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature:



Elizabeth Porta

Title: Technical Director/Representative

Date: 05/07/13

# ORGANICS

# SEMIVOLATILES

**Project Name:** Not Specified**Lab Number:** L1307153**Project Number:** 18536**Report Date:** 05/07/13**SAMPLE RESULTS**

**Lab ID:** L1307153-01  
**Client ID:** 136849  
**Sample Location:** Not Specified  
**Matrix:** Air Cartridge  
**Analytical Method:** 105,8270D-SIM/NOAA-M  
**Analytical Date:** 04/29/13 19:16  
**Analyst:** AC

**Date Collected:** 04/19/13 00:00  
**Date Received:** 04/23/13  
**Field Prep:** Not Specified  
**Extraction Method:** EPA 3540C  
**Extraction Date:** 04/26/13 13:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
PCB Homologs by GC/MS-SIM (LowVol) - Mansfield Lab						
Monochlorobiphenyls	ND		ng/cart	10.0	--	1
Dichlorobiphenyls	24.4	G	ng/cart	10.0	--	1
Trichlorobiphenyls	25.9		ng/cart	10.0	--	1
Tetrachlorobiphenyls	30.9		ng/cart	10.0	--	1
Pentachlorobiphenyls	55.3		ng/cart	10.0	--	1
Hexachlorobiphenyls	45.9		ng/cart	10.0	--	1
Heptachlorobiphenyls	18.1		ng/cart	10.0	--	1
Octachlorobiphenyls	ND		ng/cart	10.0	--	1
Nonachlorobiphenyls	ND		ng/cart	10.0	--	1
Decachlorobiphenyl	ND		ng/cart	10.0	--	1
Total Homologs	201	G	ng/cart	10.0	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Cl3-BZ#19-C13	127	Q	50-125
Cl8-BZ#202-C13	109		50-125

**Project Name:** Not Specified**Lab Number:** L1307153**Project Number:** 18536**Report Date:** 05/07/13**SAMPLE RESULTS**

**Lab ID:** L1307153-02  
**Client ID:** 136850  
**Sample Location:** Not Specified  
**Matrix:** Air Cartridge  
**Analytical Method:** 105,8270D-SIM/NOAA-M  
**Analytical Date:** 04/29/13 20:12  
**Analyst:** AC

**Date Collected:** 04/19/13 00:00  
**Date Received:** 04/23/13  
**Field Prep:** Not Specified  
**Extraction Method:** EPA 3540C  
**Extraction Date:** 04/26/13 13:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
PCB Homologs by GC/MS-SIM (LowVol) - Mansfield Lab						
Monochlorobiphenyls	ND		ng/cart	10.0	--	1
Dichlorobiphenyls	38.8	G	ng/cart	10.0	--	1
Trichlorobiphenyls	50.2		ng/cart	10.0	--	1
Tetrachlorobiphenyls	55.1		ng/cart	10.0	--	1
Pentachlorobiphenyls	79.2		ng/cart	10.0	--	1
Hexachlorobiphenyls	74.1		ng/cart	10.0	--	1
Heptachlorobiphenyls	29.8		ng/cart	10.0	--	1
Octachlorobiphenyls	ND		ng/cart	10.0	--	1
Nonachlorobiphenyls	ND		ng/cart	10.0	--	1
Decachlorobiphenyl	ND		ng/cart	10.0	--	1
Total Homologs	327	G	ng/cart	10.0	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Cl3-BZ#19-C13	131	Q	50-125
Cl8-BZ#202-C13	115		50-125



**Project Name:** Not Specified**Lab Number:** L1307153**Project Number:** 18536**Report Date:** 05/07/13**SAMPLE RESULTS**

**Lab ID:** L1307153-03  
**Client ID:** 136851  
**Sample Location:** Not Specified  
**Matrix:** Air Cartridge  
**Analytical Method:** 105,8270D-SIM/NOAA-M  
**Analytical Date:** 04/29/13 21:08  
**Analyst:** AC

**Date Collected:** 04/19/13 00:00  
**Date Received:** 04/23/13  
**Field Prep:** Not Specified  
**Extraction Method:** EPA 3540C  
**Extraction Date:** 04/26/13 13:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
PCB Homologs by GC/MS-SIM (LowVol) - Mansfield Lab						
Monochlorobiphenyls	ND		ng/cart	10.0	--	1
Dichlorobiphenyls	29.2	G	ng/cart	10.0	--	1
Trichlorobiphenyls	34.8		ng/cart	10.0	--	1
Tetrachlorobiphenyls	47.1		ng/cart	10.0	--	1
Pentachlorobiphenyls	70.3		ng/cart	10.0	--	1
Hexachlorobiphenyls	43.0		ng/cart	10.0	--	1
Heptachlorobiphenyls	16.7		ng/cart	10.0	--	1
Octachlorobiphenyls	ND		ng/cart	10.0	--	1
Nonachlorobiphenyls	ND		ng/cart	10.0	--	1
Decachlorobiphenyl	ND		ng/cart	10.0	--	1
Total Homologs	241	G	ng/cart	10.0	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Cl3-BZ#19-C13	130	Q	50-125
Cl8-BZ#202-C13	113		50-125

**Project Name:** Not Specified**Lab Number:** L1307153**Project Number:** 18536**Report Date:** 05/07/13**SAMPLE RESULTS**

**Lab ID:** L1307153-04  
**Client ID:** 136852  
**Sample Location:** Not Specified  
**Matrix:** Air Cartridge  
**Analytical Method:** 105,8270D-SIM/NOAA-M  
**Analytical Date:** 04/29/13 22:04  
**Analyst:** AC

**Date Collected:** 04/19/13 00:00  
**Date Received:** 04/23/13  
**Field Prep:** Not Specified  
**Extraction Method:** EPA 3540C  
**Extraction Date:** 04/26/13 13:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
PCB Homologs by GC/MS-SIM (LowVol) - Mansfield Lab						
Monochlorobiphenyls	ND		ng/cart	10.0	--	1
Dichlorobiphenyls	24.4	G	ng/cart	10.0	--	1
Trichlorobiphenyls	25.9		ng/cart	10.0	--	1
Tetrachlorobiphenyls	32.0		ng/cart	10.0	--	1
Pentachlorobiphenyls	30.3		ng/cart	10.0	--	1
Hexachlorobiphenyls	16.1		ng/cart	10.0	--	1
Heptachlorobiphenyls	ND		ng/cart	10.0	--	1
Octachlorobiphenyls	ND		ng/cart	10.0	--	1
Nonachlorobiphenyls	ND		ng/cart	10.0	--	1
Decachlorobiphenyl	ND		ng/cart	10.0	--	1
Total Homologs	135	G	ng/cart	10.0	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Cl3-BZ#19-C13	134	Q	50-125
Cl8-BZ#202-C13	116		50-125

**Project Name:** Not Specified**Lab Number:** L1307153**Project Number:** 18536**Report Date:** 05/07/13**SAMPLE RESULTS**

**Lab ID:** L1307153-05  
**Client ID:** 136853  
**Sample Location:** Not Specified  
**Matrix:** Air Cartridge  
**Analytical Method:** 105,8270D-SIM/NOAA-M  
**Analytical Date:** 04/29/13 23:00  
**Analyst:** AC

**Date Collected:** 04/19/13 00:00  
**Date Received:** 04/23/13  
**Field Prep:** Not Specified  
**Extraction Method:** EPA 3540C  
**Extraction Date:** 04/26/13 13:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
PCB Homologs by GC/MS-SIM (LowVol) - Mansfield Lab						
Monochlorobiphenyls	ND		ng/cart	10.0	--	1
Dichlorobiphenyls	ND		ng/cart	10.0	--	1
Trichlorobiphenyls	10.3		ng/cart	10.0	--	1
Tetrachlorobiphenyls	19.4		ng/cart	10.0	--	1
Pentachlorobiphenyls	34.6		ng/cart	10.0	--	1
Hexachlorobiphenyls	18.0		ng/cart	10.0	--	1
Heptachlorobiphenyls	ND		ng/cart	10.0	--	1
Octachlorobiphenyls	ND		ng/cart	10.0	--	1
Nonachlorobiphenyls	ND		ng/cart	10.0	--	1
Decachlorobiphenyl	ND		ng/cart	10.0	--	1
Total Homologs	82.3		ng/cart	10.0	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Cl3-BZ#19-C13	130	Q	50-125
Cl8-BZ#202-C13	110		50-125

**Project Name:** Not Specified**Lab Number:** L1307153**Project Number:** 18536**Report Date:** 05/07/13**SAMPLE RESULTS**

**Lab ID:** L1307153-06  
**Client ID:** 136854  
**Sample Location:** Not Specified  
**Matrix:** Air Cartridge  
**Analytical Method:** 105,8270D-SIM/NOAA-M  
**Analytical Date:** 04/29/13 23:56  
**Analyst:** AC

**Date Collected:** 04/19/13 00:00  
**Date Received:** 04/23/13  
**Field Prep:** Not Specified  
**Extraction Method:** EPA 3540C  
**Extraction Date:** 04/26/13 13:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
PCB Homologs by GC/MS-SIM (LowVol) - Mansfield Lab						
Monochlorobiphenyls	ND		ng/cart	10.0	--	1
Dichlorobiphenyls	26.5	G	ng/cart	10.0	--	1
Trichlorobiphenyls	33.6		ng/cart	10.0	--	1
Tetrachlorobiphenyls	39.0		ng/cart	10.0	--	1
Pentachlorobiphenyls	63.6		ng/cart	10.0	--	1
Hexachlorobiphenyls	40.5		ng/cart	10.0	--	1
Heptachlorobiphenyls	16.3		ng/cart	10.0	--	1
Octachlorobiphenyls	ND		ng/cart	10.0	--	1
Nonachlorobiphenyls	ND		ng/cart	10.0	--	1
Decachlorobiphenyl	ND		ng/cart	10.0	--	1
Total Homologs	220	G	ng/cart	10.0	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Cl3-BZ#19-C13	130	Q	50-125
Cl8-BZ#202-C13	113		50-125

**Project Name:** Not Specified**Lab Number:** L1307153**Project Number:** 18536**Report Date:** 05/07/13**SAMPLE RESULTS**

**Lab ID:** L1307153-07  
**Client ID:** 136855  
**Sample Location:** Not Specified  
**Matrix:** Air Cartridge  
**Analytical Method:** 105,8270D-SIM/NOAA-M  
**Analytical Date:** 04/30/13 00:52  
**Analyst:** AC

**Date Collected:** 04/19/13 00:00  
**Date Received:** 04/23/13  
**Field Prep:** Not Specified  
**Extraction Method:** EPA 3540C  
**Extraction Date:** 04/26/13 13:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
PCB Homologs by GC/MS-SIM (LowVol) - Mansfield Lab						
Monochlorobiphenyls	ND		ng/cart	10.0	--	1
Dichlorobiphenyls	28.9	G	ng/cart	10.0	--	1
Trichlorobiphenyls	26.4		ng/cart	10.0	--	1
Tetrachlorobiphenyls	34.9		ng/cart	10.0	--	1
Pentachlorobiphenyls	62.3		ng/cart	10.0	--	1
Hexachlorobiphenyls	20.8		ng/cart	10.0	--	1
Heptachlorobiphenyls	ND		ng/cart	10.0	--	1
Octachlorobiphenyls	ND		ng/cart	10.0	--	1
Nonachlorobiphenyls	ND		ng/cart	10.0	--	1
Decachlorobiphenyl	ND		ng/cart	10.0	--	1
Total Homologs	173	G	ng/cart	10.0	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Cl3-BZ#19-C13	136	Q	50-125
Cl8-BZ#202-C13	113		50-125

**Project Name:** Not Specified**Lab Number:** L1307153**Project Number:** 18536**Report Date:** 05/07/13**SAMPLE RESULTS**

**Lab ID:** L1307153-08  
**Client ID:** 136856  
**Sample Location:** Not Specified  
**Matrix:** Air Cartridge  
**Analytical Method:** 105,8270D-SIM/NOAA-M  
**Analytical Date:** 04/30/13 01:48  
**Analyst:** AC

**Date Collected:** 04/19/13 00:00  
**Date Received:** 04/23/13  
**Field Prep:** Not Specified  
**Extraction Method:** EPA 3540C  
**Extraction Date:** 04/26/13 13:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
PCB Homologs by GC/MS-SIM (LowVol) - Mansfield Lab						
Monochlorobiphenyls	ND		ng/cart	10.0	--	1
Dichlorobiphenyls	29.6	G	ng/cart	10.0	--	1
Trichlorobiphenyls	38.2		ng/cart	10.0	--	1
Tetrachlorobiphenyls	42.1		ng/cart	10.0	--	1
Pentachlorobiphenyls	51.6		ng/cart	10.0	--	1
Hexachlorobiphenyls	20.0		ng/cart	10.0	--	1
Heptachlorobiphenyls	ND		ng/cart	10.0	--	1
Octachlorobiphenyls	ND		ng/cart	10.0	--	1
Nonachlorobiphenyls	ND		ng/cart	10.0	--	1
Decachlorobiphenyl	ND		ng/cart	10.0	--	1
Total Homologs	182	G	ng/cart	10.0	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Cl3-BZ#19-C13	130	Q	50-125
Cl8-BZ#202-C13	110		50-125

**Project Name:** Not Specified**Lab Number:** L1307153**Project Number:** 18536**Report Date:** 05/07/13**SAMPLE RESULTS**

**Lab ID:** L1307153-09  
**Client ID:** 136857  
**Sample Location:** Not Specified  
**Matrix:** Air Cartridge  
**Analytical Method:** 105,8270D-SIM/NOAA-M  
**Analytical Date:** 04/30/13 04:15  
**Analyst:** AC

**Date Collected:** 04/19/13 00:00  
**Date Received:** 04/23/13  
**Field Prep:** Not Specified  
**Extraction Method:** EPA 3540C  
**Extraction Date:** 04/26/13 13:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
PCB Homologs by GC/MS-SIM (LowVol) - Mansfield Lab						
Monochlorobiphenyls	ND		ng/cart	10.0	--	1
Dichlorobiphenyls	40.6	G	ng/cart	10.0	--	1
Trichlorobiphenyls	53.3		ng/cart	10.0	--	1
Tetrachlorobiphenyls	41.1		ng/cart	10.0	--	1
Pentachlorobiphenyls	64.0		ng/cart	10.0	--	1
Hexachlorobiphenyls	48.7		ng/cart	10.0	--	1
Heptachlorobiphenyls	23.6		ng/cart	10.0	--	1
Octachlorobiphenyls	ND		ng/cart	10.0	--	1
Nonachlorobiphenyls	ND		ng/cart	10.0	--	1
Decachlorobiphenyl	ND		ng/cart	10.0	--	1
Total Homologs	271	G	ng/cart	10.0	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Cl3-BZ#19-C13	139	Q	50-125
Cl8-BZ#202-C13	125		50-125

**Project Name:** Not Specified**Lab Number:** L1307153**Project Number:** 18536**Report Date:** 05/07/13**SAMPLE RESULTS**

**Lab ID:** L1307153-10  
**Client ID:** 136858  
**Sample Location:** Not Specified  
**Matrix:** Air Cartridge  
**Analytical Method:** 105,8270D-SIM/NOAA-M  
**Analytical Date:** 04/30/13 05:10  
**Analyst:** AC

**Date Collected:** 04/19/13 00:00  
**Date Received:** 04/23/13  
**Field Prep:** Not Specified  
**Extraction Method:** EPA 3540C  
**Extraction Date:** 04/26/13 13:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
PCB Homologs by GC/MS-SIM (LowVol) - Mansfield Lab						
Monochlorobiphenyls	ND		ng/cart	10.0	--	1
Dichlorobiphenyls	39.9	G	ng/cart	10.0	--	1
Trichlorobiphenyls	47.8		ng/cart	10.0	--	1
Tetrachlorobiphenyls	41.4		ng/cart	10.0	--	1
Pentachlorobiphenyls	65.7		ng/cart	10.0	--	1
Hexachlorobiphenyls	40.2		ng/cart	10.0	--	1
Heptachlorobiphenyls	19.9		ng/cart	10.0	--	1
Octachlorobiphenyls	ND		ng/cart	10.0	--	1
Nonachlorobiphenyls	ND		ng/cart	10.0	--	1
Decachlorobiphenyl	ND		ng/cart	10.0	--	1
Total Homologs	255	G	ng/cart	10.0	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Cl3-BZ#19-C13	126	Q	50-125
Cl8-BZ#202-C13	104		50-125



**Project Name:** Not Specified**Lab Number:** L1307153**Project Number:** 18536**Report Date:** 05/07/13**SAMPLE RESULTS**

**Lab ID:** L1307153-11  
**Client ID:** 136859  
**Sample Location:** Not Specified  
**Matrix:** Air Cartridge  
**Analytical Method:** 105,8270D-SIM/NOAA-M  
**Analytical Date:** 04/30/13 06:06  
**Analyst:** AC

**Date Collected:** 04/19/13 00:00  
**Date Received:** 04/23/13  
**Field Prep:** Not Specified  
**Extraction Method:** EPA 3540C  
**Extraction Date:** 04/26/13 13:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
PCB Homologs by GC/MS-SIM (LowVol) - Mansfield Lab						
Monochlorobiphenyls	ND		ng/cart	10.0	--	1
Dichlorobiphenyls	46.6	G	ng/cart	10.0	--	1
Trichlorobiphenyls	51.4		ng/cart	10.0	--	1
Tetrachlorobiphenyls	44.1		ng/cart	10.0	--	1
Pentachlorobiphenyls	60.2		ng/cart	10.0	--	1
Hexachlorobiphenyls	39.1		ng/cart	10.0	--	1
Heptachlorobiphenyls	21.6		ng/cart	10.0	--	1
Octachlorobiphenyls	ND		ng/cart	10.0	--	1
Nonachlorobiphenyls	ND		ng/cart	10.0	--	1
Decachlorobiphenyl	ND		ng/cart	10.0	--	1
Total Homologs	263	G	ng/cart	10.0	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Cl3-BZ#19-C13	129	Q	50-125
Cl8-BZ#202-C13	113		50-125

**Project Name:** Not Specified**Lab Number:** L1307153**Project Number:** 18536**Report Date:** 05/07/13**SAMPLE RESULTS**

**Lab ID:** L1307153-12  
**Client ID:** 136860  
**Sample Location:** Not Specified  
**Matrix:** Air Cartridge  
**Analytical Method:** 105,8270D-SIM/NOAA-M  
**Analytical Date:** 04/30/13 07:02  
**Analyst:** AC

**Date Collected:** 04/19/13 00:00  
**Date Received:** 04/23/13  
**Field Prep:** Not Specified  
**Extraction Method:** EPA 3540C  
**Extraction Date:** 04/26/13 13:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
PCB Homologs by GC/MS-SIM (LowVol) - Mansfield Lab						
Monochlorobiphenyls	ND		ng/cart	10.0	--	1
Dichlorobiphenyls	ND		ng/cart	10.0	--	1
Trichlorobiphenyls	22.9		ng/cart	10.0	--	1
Tetrachlorobiphenyls	24.6		ng/cart	10.0	--	1
Pentachlorobiphenyls	49.9		ng/cart	10.0	--	1
Hexachlorobiphenyls	49.1		ng/cart	10.0	--	1
Heptachlorobiphenyls	20.0		ng/cart	10.0	--	1
Octachlorobiphenyls	ND		ng/cart	10.0	--	1
Nonachlorobiphenyls	ND		ng/cart	10.0	--	1
Decachlorobiphenyl	ND		ng/cart	10.0	--	1
Total Homologs	167		ng/cart	10.0	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Cl3-BZ#19-C13	132	Q	50-125
Cl8-BZ#202-C13	118		50-125

**Project Name:** Not Specified**Lab Number:** L1307153**Project Number:** 18536**Report Date:** 05/07/13**SAMPLE RESULTS**

**Lab ID:** L1307153-13  
**Client ID:** 136861  
**Sample Location:** Not Specified  
**Matrix:** Air Cartridge  
**Analytical Method:** 105,8270D-SIM/NOAA-M  
**Analytical Date:** 04/30/13 07:58  
**Analyst:** AC

**Date Collected:** 04/19/13 00:00  
**Date Received:** 04/23/13  
**Field Prep:** Not Specified  
**Extraction Method:** EPA 3540C  
**Extraction Date:** 04/26/13 13:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
PCB Homologs by GC/MS-SIM (LowVol) - Mansfield Lab						
Monochlorobiphenyls	ND		ng/cart	10.0	--	1
Dichlorobiphenyls	ND		ng/cart	10.0	--	1
Trichlorobiphenyls	21.5		ng/cart	10.0	--	1
Tetrachlorobiphenyls	27.7		ng/cart	10.0	--	1
Pentachlorobiphenyls	33.4		ng/cart	10.0	--	1
Hexachlorobiphenyls	18.7		ng/cart	10.0	--	1
Heptachlorobiphenyls	ND		ng/cart	10.0	--	1
Octachlorobiphenyls	ND		ng/cart	10.0	--	1
Nonachlorobiphenyls	ND		ng/cart	10.0	--	1
Decachlorobiphenyl	ND		ng/cart	10.0	--	1
Total Homologs	108		ng/cart	10.0	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Cl3-BZ#19-C13	125		50-125
Cl8-BZ#202-C13	104		50-125

**Project Name:** Not Specified**Lab Number:** L1307153**Project Number:** 18536**Report Date:** 05/07/13**SAMPLE RESULTS**

**Lab ID:** L1307153-14  
**Client ID:** 136862  
**Sample Location:** Not Specified  
**Matrix:** Air Cartridge  
**Analytical Method:** 105,8270D-SIM/NOAA-M  
**Analytical Date:** 04/30/13 08:54  
**Analyst:** AC

**Date Collected:** 04/19/13 00:00  
**Date Received:** 04/23/13  
**Field Prep:** Not Specified  
**Extraction Method:** EPA 3540C  
**Extraction Date:** 04/26/13 13:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
PCB Homologs by GC/MS-SIM (LowVol) - Mansfield Lab						
Monochlorobiphenyls	ND		ng/cart	10.0	--	1
Dichlorobiphenyls	ND		ng/cart	10.0	--	1
Trichlorobiphenyls	ND		ng/cart	10.0	--	1
Tetrachlorobiphenyls	ND		ng/cart	10.0	--	1
Pentachlorobiphenyls	ND		ng/cart	10.0	--	1
Hexachlorobiphenyls	ND		ng/cart	10.0	--	1
Heptachlorobiphenyls	ND		ng/cart	10.0	--	1
Octachlorobiphenyls	ND		ng/cart	10.0	--	1
Nonachlorobiphenyls	ND		ng/cart	10.0	--	1
Decachlorobiphenyl	ND		ng/cart	10.0	--	1
Total Homologs	ND		ng/cart	10.0	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Cl3-BZ#19-C13	132	Q	50-125
Cl8-BZ#202-C13	114		50-125

**Project Name:** Not Specified**Lab Number:** L1307153**Project Number:** 18536**Report Date:** 05/07/13**SAMPLE RESULTS**

**Lab ID:** L1307153-15  
**Client ID:** 136863  
**Sample Location:** Not Specified  
**Matrix:** Air Cartridge  
**Analytical Method:** 105,8270D-SIM/NOAA-M  
**Analytical Date:** 04/30/13 09:50  
**Analyst:** AC

**Date Collected:** 04/19/13 00:00  
**Date Received:** 04/23/13  
**Field Prep:** Not Specified  
**Extraction Method:** EPA 3540C  
**Extraction Date:** 04/26/13 13:30

Parameter	Result	Qualifier	Units	RL	MDL	Dilution Factor
PCB Homologs by GC/MS-SIM (LowVol) - Mansfield Lab						
Monochlorobiphenyls	ND		ng/cart	10.0	--	1
Dichlorobiphenyls	ND		ng/cart	10.0	--	1
Trichlorobiphenyls	ND		ng/cart	10.0	--	1
Tetrachlorobiphenyls	ND		ng/cart	10.0	--	1
Pentachlorobiphenyls	ND		ng/cart	10.0	--	1
Hexachlorobiphenyls	ND		ng/cart	10.0	--	1
Heptachlorobiphenyls	ND		ng/cart	10.0	--	1
Octachlorobiphenyls	ND		ng/cart	10.0	--	1
Nonachlorobiphenyls	ND		ng/cart	10.0	--	1
Decachlorobiphenyl	ND		ng/cart	10.0	--	1
Total Homologs	ND		ng/cart	10.0	--	1

Surrogate	% Recovery	Qualifier	Acceptance Criteria
Cl3-BZ#19-C13	130	Q	50-125
Cl8-BZ#202-C13	111		50-125

Project Name: Not Specified

Lab Number: L1307153

Project Number: 18536

Report Date: 05/07/13

### Method Blank Analysis Batch Quality Control

Analytical Method: 105,8270D-SIM/NOAA-M

Extraction Method: EPA 3540C

Analytical Date: 04/29/13 17:24

Extraction Date: 04/26/13 13:30

Analyst: AC

Parameter	Result	Qualifier	Units	RL	MDL
PCB Homologs by GC/MS-SIM (LowVol) - Mansfield Lab for sample(s): 01-15 Batch: WG604257-1					
Monochlorobiphenyls	ND		ng/cart	10.0	--
Dichlorobiphenyls	ND		ng/cart	10.0	--
Trichlorobiphenyls	ND		ng/cart	10.0	--
Tetrachlorobiphenyls	ND		ng/cart	10.0	--
Pentachlorobiphenyls	ND		ng/cart	10.0	--
Hexachlorobiphenyls	ND		ng/cart	10.0	--
Heptachlorobiphenyls	ND		ng/cart	10.0	--
Octachlorobiphenyls	ND		ng/cart	10.0	--
Nonachlorobiphenyls	ND		ng/cart	10.0	--
Decachlorobiphenyl	ND		ng/cart	10.0	--
Total Homologs	ND		ng/cart	10.0	--

Surrogate	%Recovery	Qualifier	Acceptance Criteria
Cl3-BZ#19-C13	106		50-125
Cl8-BZ#202-C13	91		50-125

# Lab Control Sample Analysis

## Batch Quality Control

Project Name: Not Specified

Project Number: 18536

Lab Number: L1307153

Report Date: 05/07/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
PCB Homologs by GC/MS-SIM (LowVol) - Mansfield Lab Associated sample(s): 01-15 Batch: WG604257-2								
Cl1-BZ#1	95		-		40-140	-		30
CL1-BZ#3	96		-		40-140	-		30
Cl2-BZ#4/#10	107		-		40-140	-		30
Cl2-BZ#5/#8	91		-		40-140	-		30
Cl3-BZ#19	104		-		40-140	-		30
Cl3-BZ#18	88		-		40-140	-		30
Cl2-BZ#15	80		-		40-140	-		30
Cl4-BZ#54	94		-		40-140	-		30
Cl3-BZ#29	84		-		40-140	-		30
Cl4-BZ#50	101		-		40-140	-		30
Cl3-BZ#28/#31	87		-		40-140	-		30
Cl4-BZ#45	103		-		40-140	-		30
Cl4-BZ#52	89		-		40-140	-		30
Cl4-BZ#43/#49	97		-		40-140	-		30
Cl4-Bz#47/#48	91		-		40-140	-		30
Cl5-BZ#104	90		-		40-140	-		30
Cl4-BZ#44	89		-		40-140	-		30
Cl3-BZ#37	76		-		40-140	-		30
Cl4-BZ#74	87		-		40-140	-		30
Cl6-BZ#155	99		-		40-140	-		30
Cl4-BZ#70	88		-		40-140	-		30

# Lab Control Sample Analysis

## Batch Quality Control

Project Name: Not Specified

Project Number: 18536

Lab Number: L1307153

Report Date: 05/07/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
PCB Homologs by GC/MS-SIM (LowVol) - Mansfield Lab Associated sample(s): 01-15 Batch: WG604257-2								
Cl4-BZ#66	87		-		40-140	-		30
Cl5-BZ#95	80		-		40-140	-		30
Cl4-BZ#56/#60	84		-		40-140	-		30
Cl5-BZ#101/#84	99		-		40-140	-		30
Cl5-BZ#99	94		-		40-140	-		30
Cl6-BZ#154	91		-		40-140	-		30
Cl5-BZ#110	80		-		40-140	-		30
Cl4-BZ#81	88		-		40-140	-		30
Cl5-BZ#87	96		-		40-140	-		30
Cl6-BZ#151	87		-		40-140	-		30
Cl4-BZ#77	85		-		40-140	-		30
Cl5-BZ#123	86		-		40-140	-		30
Cl6-BZ#149	92		-		40-140	-		30
Cl7-BZ#188	88		-		40-140	-		30
Cl5-BZ#118	86		-		40-140	-		30
Cl6-BZ#146	91		-		40-140	-		30
Cl5-BZ#114	83		-		40-140	-		30
Cl6-BZ#153	86		-		40-140	-		30
Cl6-BZ#138/#163	80		-		40-140	-		30
Cl6-BZ#158	95		-		40-140	-		30
Cl5-BZ#105	79		-		40-140	-		30



# Lab Control Sample Analysis

## Batch Quality Control

Project Name: Not Specified

Project Number: 18536

Lab Number: L1307153

Report Date: 05/07/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
PCB Homologs by GC/MS-SIM (LowVol) - Mansfield Lab Associated sample(s): 01-15 Batch: WG604257-2								
Cl7-BZ#182/#187	94		-		40-140	-		30
Cl7-BZ#183	97		-		40-140	-		30
Cl6-BZ#167/#128	95		-		40-140	-		30
Cl5-BZ#126	69		-		40-140	-		30
Cl7-BZ#174	104		-		40-140	-		30
Cl8-BZ#202	101		-		40-140	-		30
Cl7-BZ#177	101		-		40-140	-		30
Cl6-BZ#156	97		-		40-140	-		30
Cl6-BZ#157	94		-		40-140	-		30
Cl7-BZ#180	93		-		40-140	-		30
Cl7-BZ#170/#190	88		-		40-140	-		30
Cl8-BZ#201	104		-		40-140	-		30
Cl6-BZ#169	106		-		40-140	-		30
Cl9-BZ#208	106		-		40-140	-		30
Cl7-BZ#189	114		-		40-140	-		30
Cl8-BZ#195	102		-		40-140	-		30
Cl8-BZ#194	101		-		40-140	-		30
Cl8-BZ#205	102		-		40-140	-		30
Cl9-BZ#206	101		-		40-140	-		30
Cl10-BZ#209	96		-		40-140	-		30

# **Lab Control Sample Analysis** **Batch Quality Control**

**Project Name:** Not Specified

**Project Number:** 18536

**Lab Number:** L1307153

**Report Date:** 05/07/13

Parameter	LCS %Recovery	Qual	LCSD %Recovery	Qual	%Recovery Limits	RPD	Qual	RPD Limits
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PCB Homologs by GC/MS-SIM (LowVol) - Mansfield Lab Associated sample(s): 01-15 Batch: WG604257-2

Surrogate	LCS %Recovery	Qual	LCSD %Recovery	Qual	Acceptance Criteria
Cl3-BZ#19-C13	138	Q			50-125
Cl8-BZ#202-C13	120				50-125

Project Name: Not Specified

Lab Number: L1307153

Project Number: 18536

Report Date: 05/07/13

## Sample Receipt and Container Information

Were project specific reporting limits specified?

YES

Reagent H2O Preserved Vials Frozen on: NA

## Cooler Information Custody Seal

## Cooler

A Absent

## Container Information

Container ID	Container Type	Cooler	pH	Temp deg C	Pres	Seal	Analysis(*)
L1307153-01A	PUF Air Cartridge - High or Low	A	N/A	-3.3	Y	Absent	A2-PCBHOMS-8270SIML(7)
L1307153-02A	PUF Air Cartridge - High or Low	A	N/A	-3.3	Y	Absent	A2-PCBHOMS-8270SIML(7)
L1307153-03A	PUF Air Cartridge - High or Low	A	N/A	-3.3	Y	Absent	A2-PCBHOMS-8270SIML(7)
L1307153-04A	PUF Air Cartridge - High or Low	A	N/A	-3.3	Y	Absent	A2-PCBHOMS-8270SIML(7)
L1307153-05A	PUF Air Cartridge - High or Low	A	N/A	-3.3	Y	Absent	A2-PCBHOMS-8270SIML(7)
L1307153-06A	PUF Air Cartridge - High or Low	A	N/A	-3.3	Y	Absent	A2-PCBHOMS-8270SIML(7)
L1307153-07A	PUF Air Cartridge - High or Low	A	N/A	-3.3	Y	Absent	A2-PCBHOMS-8270SIML(7)
L1307153-08A	PUF Air Cartridge - High or Low	A	N/A	-3.3	Y	Absent	A2-PCBHOMS-8270SIML(7)
L1307153-09A	PUF Air Cartridge - High or Low	A	N/A	-3.3	Y	Absent	A2-PCBHOMS-8270SIML(7)
L1307153-10A	PUF Air Cartridge - High or Low	A	N/A	-3.3	Y	Absent	A2-PCBHOMS-8270SIML(7)
L1307153-11A	PUF Air Cartridge - High or Low	A	N/A	-3.3	Y	Absent	A2-PCBHOMS-8270SIML(7)
L1307153-12A	PUF Air Cartridge - High or Low	A	N/A	-3.3	Y	Absent	A2-PCBHOMS-8270SIML(7)
L1307153-13A	PUF Air Cartridge - High or Low	A	N/A	-3.3	Y	Absent	A2-PCBHOMS-8270SIML(7)
L1307153-14A	PUF Air Cartridge - High or Low	A	N/A	-3.3	Y	Absent	A2-PCBHOMS-8270SIML(7)
L1307153-15A	PUF Air Cartridge - High or Low	A	N/A	-3.3	Y	Absent	A2-PCBHOMS-8270SIML(7)

\*Values in parentheses indicate holding time in days

Project Name: Not Specified

Lab Number: L1307153

Project Number: 18536

Report Date: 05/07/13

## GLOSSARY

### Acronyms

EDL	- Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).
EPA	- Environmental Protection Agency.
LCS	- Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
LCSD	- Laboratory Control Sample Duplicate: Refer to LCS.
LFB	- Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.
MDL	- Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
MS	- Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available.
MSD	- Matrix Spike Sample Duplicate: Refer to MS.
NA	- Not Applicable.
NC	- Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.
NI	- Not Ignitable.
RL	- Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.
RPD	- Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.
SRM	- Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

### Footnotes

- 1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

### Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

### Data Qualifiers

- A** - Spectra identified as "Aldol Condensation Product".
- B** - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than five times (5x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit.
- C** - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.
- D** - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.
- E** - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.
- G** - The concentration may be biased high due to matrix interferences (i.e. co-elution) with non-target compound(s). The result should be considered estimated.
- H** - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.
- I** - The RPD between the results for the two columns exceeds the method-specified criteria; however, the lower value has been reported

Report Format: Data Usability Report



**Project Name:** Not Specified  
**Project Number:** 18536

**Lab Number:** L1307153  
**Report Date:** 05/07/13

**Data Qualifiers**

due to obvious interference.

- M** - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.
- NJ** - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where the identification is based on a mass spectral library search.
- P** - The RPD between the results for the two columns exceeds the method-specified criteria.
- Q** - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)
- R** - Analytical results are from sample re-analysis.
- RE** - Analytical results are from sample re-extraction.
- J** - Estimated value. This represents an estimated concentration for Tentatively Identified Compounds (TICs).
- ND** - Not detected at the reporting limit (RL) for the sample.

**Project Name:** Not Specified  
**Project Number:** 18536

**Lab Number:** L1307153  
**Report Date:** 05/07/13

## REFERENCES

- 105 Test Methods for Evaluating Solid Waste: Physical/Chemical Methods. EPA SW-846. Third Edition. Updates I - IIIA, 1997 in conjunction with NOAA Technical Memorandum NMFS-NWFSC-59: Extraction, Cleanup and GC/MS Analysis of Sediments and Tissues for Organic Contaminants, March 2004 and the Determination of Pesticides and PCBs in Water and Oil/Sediment by GC/MS: Method 680, EPA 01A0005295, November 1985.

## LIMITATION OF LIABILITIES

Alpha Analytical performs services with reasonable care and diligence normal to the analytical testing laboratory industry. In the event of an error, the sole and exclusive responsibility of Alpha Analytical shall be to re-perform the work at it's own expense. In no event shall Alpha Analytical be held liable for any incidental, consequential or special damages, including but not limited to, damages in any way connected with the use of, interpretation of, information or analysis provided by Alpha Analytical.

We strongly urge our clients to comply with EPA protocol regarding sample volume, preservation, cooling, containers, sampling procedures, holding time and splitting of samples in the field.



## Certificate/Approval Program Summary

Last revised August 3, 2012 – Mansfield Facility

The following list includes only those analytes/methods for which certification/approval is currently held. For a complete listing of analytes for the referenced methods, please contact your Alpha Customer Service Representative.

### **Connecticut Department of Public Health Certificate/Lab ID: PH-0141.**

*Wastewater/Non-Potable Water* (Inorganic Parameters: pH, Turbidity, Conductivity, Alkalinity, Aluminum, Antimony, Arsenic, Barium, Beryllium, Boron, Cadmium, Calcium, Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Strontium, Thallium, Tin, Titanium, Vanadium, Zinc, Total Residue (Solids), Total Suspended Solids (non-filterable). Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Acid Extractables, Benzidines, Phthalate Esters, Nitrosamines, Nitroaromatics & Isophorone, PAHs, Haloethers, Chlorinated Hydrocarbons, Volatile Organics.)

*Solid Waste/Soil* (Inorganic Parameters: pH, Aluminum, Antimony, Arsenic, Barium, Beryllium, Cadmium, Calcium, Chromium, Hexavalent Chromium, Cobalt, Copper, Iron, Lead, Magnesium, Manganese, Mercury, Molybdenum, Nickel, Potassium, Selenium, Silver, Sodium, Thallium, Titanium, Vanadium, Zinc, Total Organic Carbon, Corrosivity, TCLP 1311, SPLP 1312. Organic Parameters: PCBs, Organochlorine Pesticides, Technical Chlordane, Toxaphene, Volatile Organics, Acid Extractables, Benzidines, Phthalates, Nitrosamines, Nitroaromatics & Cyclic Ketones, PAHs, Haloethers, Chlorinated Hydrocarbons.)

### **Florida Department of Health Certificate/Lab ID: E87814. *NELAP Accredited.***

*Non-Potable Water* (Inorganic Parameters: SM2320B, SM2540D, SM2540G.)

*Solid & Chemical Materials* (Inorganic Parameters: 6020, 7470, 7471, 9045. Organic Parameters: EPA 8260, 8270, 8082, 8081.)

*Air & Emissions* (EPA TO-15.)

### **Louisiana Department of Environmental Quality Certificate/Lab ID: 03090. *NELAP Accredited.***

*Non-Potable Water* (Inorganic Parameters: EPA 180.1, 245.7, 1631E, 3020A, 6020A, 7470A, 9040, 9050A, SM2320B, 2540D, 2540G, 4500H-B, Organic Parameters: EPA 3510C, 3580A, 3630C, 3640A, 3660B, 3665A, 5030B, 8015D, 3570, 8081B, 8082A, 8260B, 8270C, 8270D.)

*Solid & Chemical Materials* (Inorganic Parameters: EPA 1311, 3050B, 3051A, 3060A, 6020A, 7196A, 7470A, 7471B, 7474, 9040B, 9045C, 9060. Organic Parameters: EPA 3540C, 3570, 3580A, 3630C, 3640A, 3660, 3665A, 5035, 8015D, 8081B, 8082A, 8260B, 8270C, 8270D.)

*Biological Tissue* (Inorganic Parameters: EPA 6020A. Organic Parameters: EPA 3570, 3510C, 3610B, 3630C, 3640A, 8270C, 8270D.)

*Air & Emissions* (EPA TO-15.)

### **New Hampshire Department of Environmental Services Certificate/Lab ID: 2206. *NELAP Accredited.***

*Non-Potable Water* (Inorganic Parameters: EPA 180.1, 1631E, 6020A, 7470A, 9040B, 9050A, SM2540D, 2540G, 4500H+B, 2320B, 3020A, . Organic Parameters: EPA 3510C, 3630C, 3640A, 3660B, 8081B, 8082A, 8270C, 8270D, 8015D.)

*Solid & Chemical Materials* (Inorganic Parameters: SW-846 1311, 3050B, 3051A, 6020A, 7471B, 9040B, 9045C. Organic Parameters: SW-846 3540C, 3580A, 3630C, 3640A, 3660B, 3665A, 8270C, 8015D, 8082A, 8081B.)

### **New Jersey Department of Environmental Protection Certificate/Lab ID: MA015. *NELAP Accredited.***

*Non-Potable Water* (Inorganic Parameters: SW-846 1312, 3020A, SM2320B, SM2540D, 2540G, 4500H-B, EPA 180.1, 1631E, SW-846 7470A, 9040C, 6020A, 9050A. Organic Parameters: SW-846 3510C, 3580A, 3630C, 3640A, 3660B, 3665A, 8015D, 8081B, 8082A, 8270C, 8270D)

*Solid & Chemical Materials* (Inorganic Parameters: SW-846 1311, 1312, 3050B, 3051A, 6020A, 7471B, 7474, 9040B, 9040C, 9045C, 9045D, 9060. Organic Parameters: SW-846 3540C, 3570, 3580A, 3630C, 3640A, 3660B, 3665A, 8081B, 8082A, 8270C, 8270D, 8015D.)

*Atmospheric Organic Parameters* (EPA 3C, TO-15, TO-10A, TO-13A-SIM.)

*Biological Tissue* (Inorganic Parameters: SW-846 6020A. Organic Parameters: SW-846 8270C, 8270D, 3510C, 3570, 3610C, 3630C, 3640A)

**New York Department of Health** Certificate/Lab ID: 11627. **NELAP Accredited.**

*Non-Potable Water* (Inorganic Parameters: SM2320B, SM2540D, 6020A, 1631E, 7470A, 9050A, EPA 180.1, 3020A. Organic Parameters: EPA 8270C, 8270D, 8081B, 8082A, 3510C.)

*Solid & Hazardous Waste* (Inorganic Parameters: EPA 6020A, 7471B, 7474, 9040C, 9045D. Organic Parameters: EPA 8270C, 8270D, 8081B, 8082A, 1311, 3050B, 3580A, 3570, 3051A.)

*Air & Emissions* (EPA TO-15, TO-10A.)

**Pennsylvania** Certificate/Lab ID: 68-02089 **NELAP Accredited**

*Non-Potable Water* (Inorganic Parameters: 1312, 1631E, 180.1, 3020A, 6020A, 7470A, 9040B, 9050A, 2320B, 2540D, 2540G, SM4500H+-B. Organic Parameters: 3510C, 3580A, 3630C, 3640A, 3660B, 3665A, 8015D, 8081B, 8082A, 8270C, 8270D.)

*Solid & Hazardous Waste* (Inorganic Parameters: EPA 1311, 3051A, 6020A, 7471B, 7474 9040B, 9045C, 9060. Organic Parameters: EPA3050B, 3540C, 3570, 3580A, 3630C, 3640A, 3660B, 3665A, 8270C, 8270D, 8081B, 8015D, 8082A.)

**Rhode Island Department of Health** Certificate/Lab ID: LAO00299. **NELAP Accredited via NJ-DEP.**

Refer to NJ-DEP Certificate for Non-Potable Water.

**Texas Commission of Environmental Quality** Certificate/Lab ID: T104704419-08-TX. **NELAP Accredited.**

*Solid & Chemical Materials* (Inorganic Parameters: EPA 6020, 7470, 7471, 1311, 9040, 9045, 9060. Organic Parameters: EPA 8015, 8270, 8081, 8082.)

*Air* (Organic Parameters: EPA TO-15)

**Virginia Division of Consolidated Laboratory Services** Certificate/Lab ID: 460194. **NELAP Accredited.**

*Non-Potable Water* (Inorganic Parameters: EPA 3020A, 6020A, 245.7, 9040B. Organic Parameters: EPA 3510C, 3640A, 3660B, 3665A, 8270C, 8270D, 8082A, 8081B, 8015D.)

*Solid & Chemical Materials* (Inorganic Parameters: EPA 6020A, 7470A, 7471B, 9040B, 9045C, 3050B, 3051, 9060. Organic Parameters: EPA 3540C, 3580A, 3630C, 3640A, 3660B, 3665A, 3570, 8270C, 8270D, 8081B, 8082A, 8015D.)

**Washington State Department of Ecology** Certificate/Lab ID: C954. *Non-Potable Water* (Inorganic Parameters: SM2540D, 180.1, 1631E.)

*Solid & Chemical Materials* (Inorganic Parameters: EPA 6020, 7470, 7471, 7474, 9045C, 9050A, 9060. Organic Parameters: EPA 8081, 8082, 8015, 8270.)

**U.S. Army Corps of Engineers**

**Department of Defense, L-A-B** Certificate/Lab ID: L2217.01.

*Non-Potable Water* (Inorganic Parameters: EPA 6020A, SM4500H-B. Organic Parameters: 3020A, 3510C, 8270C, 8270D, 8270C-ALK-PAH, 8270D-ALK-PAH, 8082A, 8081B, 8015D-SHC, 8015D.)

*Solid & Hazardous Waste* (Inorganic Parameters: EPA 1311, 3050B, 6020A, 7471A, 9045C, 9060, SM 2540G, ASTM D422-63. Organic Parameters: EPA 3580A, 3570, 3540C, 8270C, 8270D, 8270C-ALK-PAH, 8270D-ALK-PAH 8082A, 8081B, 8015D-SHC, 8015D.)

*Air & Emissions* (EPA TO-15.)



**Analytes Not Accredited by NELAP**

Certification is not available by NELAP for the following analytes: **8270C**: Biphenyl. **TO-15**: Halothane, 2,4,4-Trimethyl-2-pentene, 2,4,4-Trimethyl-1-pentene, Thiophene, 2-Methylthiophene, 3-Methylthiophene, 2-Ethylthiophene, 1,2,3-Trimethylbenzene, Indan, Indene, 1,2,4,5-Tetramethylbenzene, Benzothiophene, 2-Methylnaphthalene, 1-Methylnaphthalene.

CHAIN OF CUSTODY FORM

Serial No: 05071316:42  
L 1307153  
DATE: 4/19/13

FROM: Environmental Health and Engineering, Inc.  
117 Fourth Avenue  
Needham, MA 02494-2725

TO: Alpha

Please send invoices to ATTN: Accounts Payable  
Please send reports to ATTN: Data Coordinator

In all correspondence regarding this matter, please refer to EH&E Project # 18536

The cost of this analysis will be covered by EH&E Purchase Order # 18536

For EH & E Data Coordinator - URGENT DATA ☐

	SAMPLE ID	SAMPLE TYPE	ANALYTICAL METHOD/NUMBER	OTHER: Time/Date/Vol.
1	136849	Air	PCB Homolog Analysis	4/19/13 1266
2	136850			1274.4
3	136851			1280.5
4	136852			1270.8
5	136853			1275
6	136854			1270.8
7	136855			1275
8	136856			1261
9	136857			1308.2
10	136858			1265.2
11	136859			1269.5
12	136860			1266.5
13	136861			1272.5
14	136862			1278
15	136863			
	X	X	X	X

Special instructions:

☒ Standard turn around time ☐ Rush by \_\_\_\_\_ date/time ☐ Other \_\_\_\_\_

☐ Fax results 781-247-4305

☐ RETURN SAMPLES

☒ Additional report recipient ☒ Electronic transfer - datacoordinator@ehinc.com

ttruong@ehinc.com; mfragala@ehinc.com

Each signatory please return one copy of this form to the above address

Relinquished by: [Signature] of Environmental Health & Engineering, Inc. Date: 4/23/13  
Received by: [Signature] of (company name) ALPHA Date: 4/23/13 1100  
Relinquished by: \_\_\_\_\_ of (company name) \_\_\_\_\_ Date: \_\_\_\_\_  
Received by: \_\_\_\_\_ of (company name) \_\_\_\_\_ Date: \_\_\_\_\_  
Relinquished by: \_\_\_\_\_ of (company name) \_\_\_\_\_ Date: \_\_\_\_\_  
Received by: \_\_\_\_\_ of (company name) \_\_\_\_\_ Date: \_\_\_\_\_  
Lab Data  
Received by: \_\_\_\_\_ of Environmental Health & Engineering, Inc. Date: \_\_\_\_\_

Page 1 of 1